

ATTACHMENT A

CLAIMS:

Claims 1-25 (canceled)

26. (New) An optical device for viewing an object at a range of working distances, the device having an optical axis and comprising a slender tube of a certain length and having a distal end and a proximal end, an imaging system disposed at said distal end and having a wide viewing angle, and a telescopic system associated with said proximal end and having a narrow viewing angle, the telescopic system being designed to enable viewing of said image of the object, wherein space between said imaging system and said telescopic system within the slender tube, and/or space between said telescopic system and the proximal end of the slender tube, is filled with transparent optical media having a refraction index greater than 1, the imaging system being designed to form an image of said object at an image plane located on said axis and located distally to the optical media.

27. (New) An optical device according to Claim 26, wherein said telescopic system is spaced from said image plane by not less than a half of said length.

28. (New) An optical device according to Claim 26, wherein said transparent media is designed in the form of at least one transparent rod.

29. (New) An optical device according to Claim 28, wherein the said transparent rod is designed to function as a part of said imaging system.

30. (New) An optical device according to Claim 29, wherein the said transparent rod is designed to perform the function of the front lens of said telescopic system.

31. (New) An optical device according to Claim 26, wherein said narrow viewing angle is defined by a width of the tube at the location of the image plane and a distance between the image plane and the telescopic system.

32. (New) An optical device according to Claim 26, wherein said viewing angle of the imaging system is so wide and, consequently, its focal length is so short that said location of the image plane lies within the depth of field of the telescopic system over the entire range of working distances.

33. (New) An optical device according to Claim 26, wherein the imaging system includes at least one imaging element having said wide viewing angle and at least one corrective optical element adapted to reduce distortions in said image resulting from said imaging element.

34. (New) An optical device according to Claim 33, wherein said imaging element includes a ball lens.

35. (New) An optical device according to Claim 33, wherein the corrective optical element is a plano-convex lens.

36. (New) An optical device according to Claim 34, wherein the ball lens has a diameter d and the imaging system is spread within the tube over a single continuous length of about 2 - 3 times the diameter d , with the tube's length spanning about 10 - 100 times the diameter d .

37. (New) An optical device according to Claim 26, wherein the device is designed to be completely disposable.

38. (New) An optical device according to Claim 26, wherein at least one optical component of the imaging system or the telescopic system is made from plastic.

39. (New) An optical device according to Claim 26, comprising a reusable section including said telescopic system, and a disposable section in the form of said tube detachably mountable to said reusable section.

40. (New) An optical device according to Claim 26, wherein the device is an endoscope.

41. (New) An optical device according to Claim 26, wherein the device is a borescope.

42. (New) An optical device according to Claim 26, further including an illumination light guide designed to coaxially and contiguously adjoin said slender tube.

43. (New) An optical device according to Claim 42, wherein said light guide is composed of fiber optic strands.
44. (New) An optical device according to Claim 42, wherein said light guide is an annular cylinder.
45. (New) An optical device according to Claim 44, wherein said annular cylinder has an extremity processed to have a design adapted to direct the light projected therefrom in a desired intensity distribution suited to the viewing angle of the imaging system.
46. (New) An optical device according to Claim 44, further including a light guide element adapted to conduct light from a light source to the cylinder, the element being designed to match the cylinder at one end and to match the light source at the other end so as to reduce loss of light.
47. (New) An optical device according to Claim 26, further including one or more LEDs connected or connectable to an external power supply source or an internal battery.
48. (New) An optical device according to Claim 47, wherein said LEDs are placed at the distal end of the endoscope.
49. (New) An optical device according to Claim 47, wherein said LEDs are placed at the proximal end of the endoscope, in particular at the end of its viewing portion.
50. (New) A slender tube for use with the optical device defined in Claim 26.
51. (New) An optical device according to Claim 28, the telescopic system comprising a first converging lens and a second converging lens, the transparent media being in the form of two transparent rods, said first converging lens being disposed between said two rods.